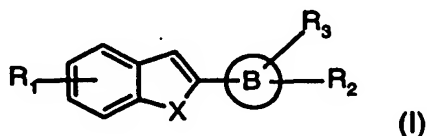


What is claimed is:

1. A method of treating or inhibiting disorders associated with the activation of large conductance calcium activated potassium channels, which comprises administering to a subject in need thereof an effective amount of a compound according to formula (I):



wherein:

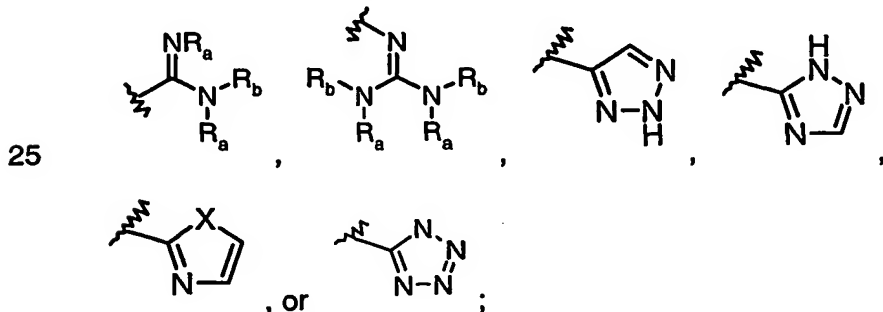
- 10 R_1 is absent or represents up to three substituents independently selected from (C₁-6)alkyl, (C₂-6)alkenyl, (C₃-6)cycloalkyl, aryl, (C₁-6)alkyl-aryl, heterocycle, (C₁-6)alkyl-heterocycle, OR_a, SR_a, hydroxy, halogen, nitro, trifluoromethyl, cyano, COR_a, CO₂R_a, SO₃H, (C₁-6)alkyl-CO₂-(C₁-6)alkyl, CONR_aR_b, and NR_aR_b;

- 15 X is NR_a, O, or S;

B is aryl or heterocycle;

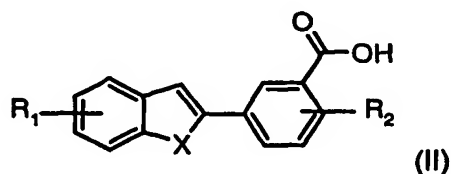
- 20 R_2 is absent or represents up to three substituents independently selected from (C₁-6)alkyl, (C₂-6)alkenyl, (C₃-6)cycloalkyl, aryl, (C₁-6)alkyl-aryl, heterocycle, (C₁-6)alkyl-heterocycle, OR_a, SR_a, hydroxy, halogen, nitro, cyano, COR_a, CO₂R_a, SO₃H, (C₁-6)alkyl-CO₂-(C₁-6)alkyl, CONR_aR_b, and NR_aR_b;

R_3 is COOH, CONR_aR_b, SO₃H, SO₂NR_aR_b, CONR_aSO₂R_b,



each R_a and R_b is independently selected from hydrogen, (C₁₋₆)alkyl, aryl, heterocycle, (C₁₋₆)alkyl-aryl, and (C₁₋₆)alkyl-heterocycle;
or a pharmaceutically acceptable salt thereof.

- 5 2. A method according to claim 1 of relaxing bladder smooth muscle tissue through the activation of large conductance calcium activated potassium channels.
3. A method according to claim 2 of treating urinary incontinence or overactive bladder.
- 10 4. A pharmaceutical composition which comprises a compound according to claim 1 and a pharmaceutically acceptable carrier.
5. A compound according to formula (II)



wherein:

- R_1 is absent or represents up to three substituents independently selected from (C₁₋₆)alkyl, (C₂₋₆)alkenyl, (C₃₋₆)cycloalkyl, aryl, (C₁₋₆)alkyl-aryl, heterocycle, (C₁₋₆)alkyl-heterocycle, OR_a , SR_a , hydroxy, halogen, nitro, trifluoromethyl, cyano, COR_a , CO_2R_a , SO_3H , (C₁₋₆)alkyl- CO_2 -(C₁₋₆)alkyl, $CONR_aR_b$, and NR_aR_b ;

X is NR_a , O, or S;

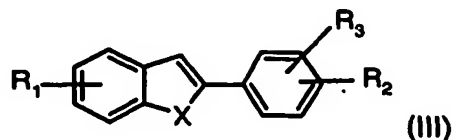
- R_2 is absent or represents up to three substituents independently selected from (C₁₋₆)alkyl, (C₂₋₆)alkenyl, (C₃₋₆)cycloalkyl, aryl, (C₁₋₆)alkyl-aryl, heterocycle, (C₁₋₆)alkyl-heterocycle, OR_a , SR_a , hydroxy, halogen, nitro, cyano, COR_a , SO_3H , (C₁₋₆)alkyl- CO_2 -(C₁₋₆)alkyl, NR_aR_b and CO_2R_c wherein R_c is aryl, (C₁₋₆)-aryl, heterocycle, (C₁₋₆)alkyl-heterocycle, and (C₁₋₆)alkyl;

- each R_a and R_b is independently selected from hydrogen, aryl, (C₁₋₆)-aryl, heterocycle, (C₁₋₆)alkyl-heterocycle, and (C₁₋₆)alkyl;

or a pharmaceutically acceptable salt thereof, provided that the compound is not

4-methoxy-3-(benzofuran-2-yl)-benzoic acid or 3-(5,6-dichloro-1H-indol-2-yl)-benzoic acid.

6. A compound according to formula (III)



wherein:

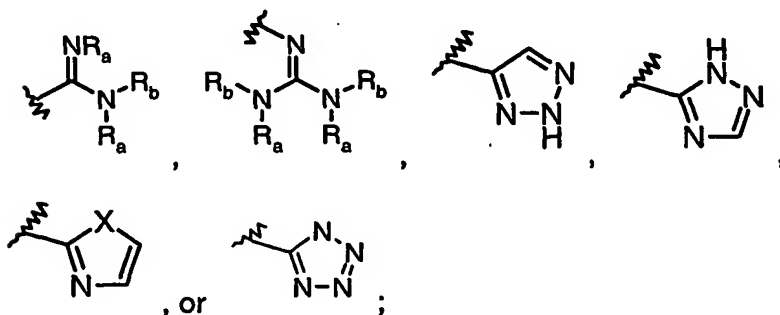
R_1 is absent or represents up to three substituents independently selected from (C₁-6)alkyl, (C₂-6)alkenyl, (C₃-6)cycloalkyl, aryl, (C₁-6)alkyl-aryl, heterocycle, (C₁-6)alkyl-heterocycle, OR_a, SR_a, hydroxy, halogen, nitro, trifluoromethyl, cyano, COR_a, CO₂R_a, SO₃H, (C₁-6)alkyl-CO₂-(C₁-6)alkyl, CONR_aR_b, and NR_aR_b;

10

X is NR_a, O, or S;

15 R_2 is absent or represents up to three substituents independently selected from (C₁-6)alkyl, (C₂-6)alkenyl, (C₃-6)cycloalkyl, aryl, (C₁-6)alkyl-aryl, heterocycle, (C₁-6)alkyl-heterocycle, OR_a, SR_a, hydroxy, halogen, nitro, cyano, COR_a, CO₂R_a, SO₃H, (C₁-6)alkyl-CO₂-(C₁-6)alkyl, and NR_aR_b;

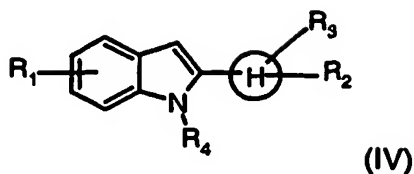
20 R_3 is SO₃H, SO₂NR_aR_b, CONR_aSO₂R_b,



each R_a and R_b is independently selected from hydrogen, aryl, (C₁-6)-aryl, heterocycle, (C₁-6)alkyl-heterocycle, and (C₁-6)alkyl; or a pharmaceutically acceptable salt thereof.

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7. A compound according to formula (IV)



5 wherein:

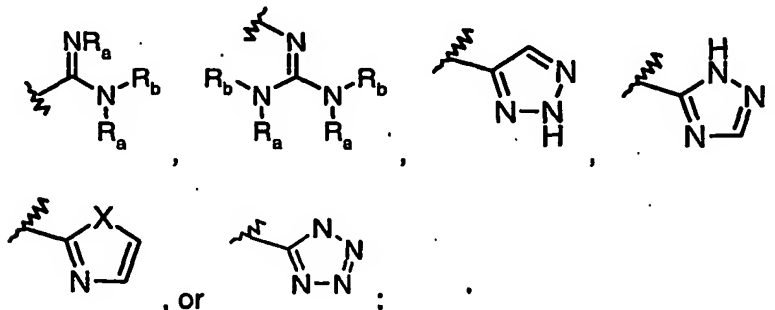
R_1 is absent or represents up to three substituents independently selected from (C₁-6)alkyl, (C₂-6)alkenyl, (C₃-6)cycloalkyl, aryl, (C₁-6)alkyl-aryl, heterocycle, (C₁-6)alkyl-heterocycle, OR_a, SR_a, hydroxy, halogen, nitro, trifluoromethyl, cyano, COR_a, CO₂R_a, SO₃H, (C₁-6)alkyl-CO₂-(C₁-6)alkyl, CONR_aR_b, and NR_aR_b;

10

R_2 is absent or represents up to three substituents independently selected from (C₁-6)alkyl, (C₂-6)alkenyl, (C₃-6)cycloalkyl, aryl, (C₁-6)alkyl-aryl, heterocycle, (C₁-6)alkyl-heterocycle, OR_a, SR_a, hydroxy, halogen, nitro, cyano, COR_a, CO₂R_a, SO₃H, (C₁-6)alkyl-CO₂-(C₁-6)alkyl, and NR_aR_b;

15

R_3 is COOH, SO₃H, SO₂NR_aR_b, CONR_aSO₂R_b,



20

R_4 hydrogen, aryl, (C₁-6)-aryl, heterocycle, (C₁-6)alkyl-heterocycle, and (C₁-6)alkyl;

H is thiophene, furan, or pyridine.

25

each R_a and R_b is independently selected from hydrogen, aryl, (C₁-6)-aryl, heterocycle, (C₁-6)alkyl-heterocycle, and (C₁-6)alkyl; or a pharmaceutically acceptable salt thereof.

8. A compound which is:

5-(5,6-Dichloro-1H-indol-2-yl)-furan-2-carboxylic acid;

3-(5,6-Dimethyl-1H-indol-2-yl)-benzoic acid;

3-(5,6-Dichloro-1H-indol-2-yl)-4-methoxy-benzoic acid;

5 5-(5,6-Dichloro-1H-indol-2-yl)-2-chloro-benzoic acid;

3-(5,6-Dichloro-1-methyl-indol-2-yl)-benzoic acid;

5-(5,6-Dimethyl-1H-indol-2-yl)-2-chloro-benzoic acid;

3-(5,6-Dimethyl-1H-indol-2-yl)-4-methoxy-benzoic acid;

3-(5-Chloro-benzofuran-2-yl)-benzoic acid;

10 3-(5,6-Dichloro-benzofuran-2-yl)-benzoic acid;

3-(Benzofuran-2-yl)-benzoic acid; or

3-(5,6-Difluoro-benzofuran-2-yl)-benzoic acid; or a pharmaceutically acceptable
salt thereof.

15